

A. AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions and listings of claims in the application:

1-22. (Cancelled)

23. (Presently amended) A method of compensating for the outputs of a number of light sensor circuits of an image sensor, each light sensor circuit representing a unit pixel and working by producing in a photoelectric converting element a sensor current proportional to a quantity of light falling thereon and converting the current into a voltage signal by using a sub-threshold region characteristic of a transistor having a logarithmic output characteristic in a weak inverse state and outputting a sensor signal corresponding to the converted voltage signal, comprising the steps of

previously setting a drain voltage of the transistor of each light sensor circuit to a value at which a sensor signal obtained by conducting the transistor with its gate voltage changed to a value higher than a normal value may correspond to a sensor signal obtainable in a dark state of the light sensor circuit with the normal gate voltage of the transistor when taking video, and

thereafter performing compensation for variations in output of each pixel signal by using a sensor signal obtainable from the light sensor circuit by changing the gate voltage of the transistor with the preset drain voltage to a value higher than the normal value for taking video,

wherein offset compensation for variations in dark-state output levels of pixel signals is performed by using sensor signals obtainable by conducting the transistors with the drain voltage of the preset value and the gate voltage changed to a value higher than the normal value for taking video, which signals correspond to sensor signals obtainable in the dark state for taking video,

wherein gain-compensation for variations in bright-state output levels of pixel signals is performed by using sensor signals obtainable by changing the gate voltage and the drain voltage of the transistor with shut-off incident light to the photoelectric converting element to values

lower than the normal values for taking video, which signals correspond to sensor signals obtainable in a bright state for taking video.

24-25. (Cancelled)

26. (Presently amended) A method of compensating for outputs of light sensor circuits of an image sensor as defined in ~~claim 25~~ claim 23, wherein ranges of changing the gain voltage and the drain voltage of the transistor to be lower than the normal voltages for taking video are of zero to values determined by subtracting a threshold voltage of the transistor from the normal gain voltage value and drain voltage value respectively.

27-32. (Cancelled)